

# Glossaries

## Acronyms

**3R** – Roadway Resurfacing, Restoration, or Rehabilitation (Project)

**A/C** – Access Control

**AADT** – Average Annual Daily Traffic

**AAWT** – Average Annual Weekday Traffic

**AASHTO** – American Association of State Highway and Transportation Officials  
(<http://www.transportation.org>)

**ADA** – Americans with Disabilities Act

**ADDs** – Automated Data/Design Standards

**ADT** – Average Daily Traffic

**AHI** – Adjusted Hazard Index

**AREMA** – American Railway Engineering and Maintenance of Way Association  
(<http://www.arena.org>)

**ATR** – Automated Traffic Recorder

**AWG** – American Wire Gauge

**AWT** – Average Weekday Traffic

**C-D** – Collector-Distributor

**CDR** – Collector Distributor Road

**CFR** – Code of Federal Regulations

**CL** – Centerline

**CORSIM** – Corridor Simulation Software

**CWP** – (GDOT) Construction Work Program

**dBA** – Decibels, A-Scale

**DHV** – Design Hour Volume

**DMS** – Dynamic Message System

**DTM** – Digital Terrain Model

**EN-EN** – Entrance followed by entrance (as in ramp terminals)

**EN-EX** – Entrance followed by exit (as in ramp terminals)

**ETI** – Engineering Traffic Investigation (Report)

**EX-EN** – Exit followed by entrance (as in ramp terminals)

**EX-EX** – Exit followed by exit (as in ramp terminals)

**FAA** – Federal Aviation Administration  
(<http://www.faa.gov/>)

**FDR** – Freeway Distributor Road

**FFPR** – (GDOT) Final Field Plan Review

**FHWA** – Federal Highway Administration  
(<http://www.fhwa.dot.gov/>)

**FRA** – Federal Railroad Administration  
(<http://www.fra.dot.gov/>)

**GDOT** – Georgia Department of Transportation  
(<http://www.dot.state.ga.us>)

**GLA** – Gross Leasable Area

**GRIP** – Governor's Road Improvement Program  
(<http://www.dot.state.ga.us/DOT/plan-prog/planning/programs/grip/>)

**GRTA** – Georgia Regional Transportation Authority (<http://www.grta.org/>)

**HCM** – Highway Capacity Manual (see **References** for additional information)

**HCS** – Highway Capacity Software  
(<http://mctrans.ce.ufl.edu/hcs/>)

**HOV** – High Occupancy Vehicle

**IES** – Illuminating Engineering Society

**IESNA** – Illuminating Engineering Society of North America (<http://www.iesna.org>)

**ISTEA** – Intermodal Surface Transportation Equity Act  
([http://www.bts.gov/laws\\_and\\_regulations/](http://www.bts.gov/laws_and_regulations/))

**ITE** – Institute of Transportation Engineers  
(<http://www.ite.org/>)

<b>L/A</b> – Limited Access	<b>PVI</b> – Point of Vertical Intersection
<b>LARP</b> – Local Assistance Road Program	<b>QPL</b> – (GDOT) Qualified Projects List
<b>LOS</b> – Level of Service	<b>RCInfo</b> – Roadway Characteristics Information
<b>LR</b> – Long Range	<b>RDG</b> – (AASHTO) Roadside Design Guide ( <a href="https://bookstore.transportation.org/item_details.aspx?ID=148">https://bookstore.transportation.org/item_details.aspx?ID=148</a> )
<b>LRFD</b> – (AASHTO) Load and Resistance Factor Design	<b>ROR</b> – Run-off-Road (as in crash)
<b>LRTP</b> – Long Range Transportation Plan	<b>ROW</b> – Right-of-Way
<b>MPO</b> – Metropolitan Planning Organization	<b>RTV</b> – Right Turn Volume
<b>MUTCD</b> – Manual on Uniform Traffic Control Devices (FHWA) see <b>References</b> for additional information.	<b>RV</b> – Recreational Vehicle
<b>NCHRP</b> – National Cooperative Highway Research Program ( <a href="http://www4.nationalacademies.org/trb/crp.nsf">http://www4.nationalacademies.org/trb/crp.nsf</a> )	<b>SIDRA</b> – Signalized and Unsignalized Intersection Design and Research Aid
<b>NHS</b> – National Highway System	<b>SPUI</b> – Single Point Urban Interchange
<b>OCGA</b> – Official Code of Georgia ( <a href="http://www.lexis-nexis.com/hottopics/gacode/default.asp">http://www.lexis-nexis.com/hottopics/gacode/default.asp</a> )	<b>SRTA</b> – State Road and Tollway Authority
<b>OEL</b> – (GDOT) Office of Environment and Location ( <a href="http://www.dot.state.ga.us/preconstruction/oel/index.shtml">http://www.dot.state.ga.us/preconstruction/oel/index.shtml</a> )	<b>STARS</b> – (Georgia) State Traffic and Report Statistics ( <a href="http://www.dot.state.ga.us/dot/plan-prog/transportation_data/TrafficCD/index.shtml">http://www.dot.state.ga.us/dot/plan-prog/transportation_data/TrafficCD/index.shtml</a> )
<b>PDP</b> – (GDOT) Plan Development Process	<b>STIP</b> – Statewide Transportation Improvement Plan, also referred to as SWTP
<b>PE</b> – Preliminary Engineering	<b>SWTP</b> – Statewide Transportation Plan ( <a href="http://www.dot.state.ga.us/dot/plan-prog/planning/swtp/index.shtml">http://www.dot.state.ga.us/dot/plan-prog/planning/swtp/index.shtml</a> )
<b>PHF</b> – Peak Hour Factor	<b>TAZ</b> – Traffic Analysis Zone
<b>PGL</b> – Profile Grade Line	<b>TIP</b> – Transportation Improvement Program
<b>PI</b> – Point of Intersection (intersection of tangents to a curve)	<b>TL</b> – Travel Lane
<b>PC</b> – Point of Curvature (where a curve begins)	<b>TOPPS</b> – Transportation Online Policy and Procedure System ( <a href="http://www.dot.state.ga.us/topps/index.shtml">http://www.dot.state.ga.us/topps/index.shtml</a> )
<b>PCC</b> – Portland Cement Concrete	<b>TRB</b> – Transportation Research Board
<b>PFPR</b> – Preliminary Field Plan Review	<b>TWLT</b> – Two-Way Left Turn
<b>PHV</b> – Peak Hour Volume	<b>UAPSM</b> – (GDOT) Utility Accommodation Policy and Standards Manual. See <b>References</b> for additional information.
<b>PM</b> – Preventive Maintenance	
<b>PT</b> – Point of Tangent (where a curve ends)	

**USGS** – United States Geological Survey  
(<http://www.usgs.gov/>)

**VE** – Value Engineering

**Vpd** – Vehicles per day

**WB** – Wheel Base (of a design vehicle)

## Definition of Terms

**3R Project** – A non-interstate resurfacing, restoration, or rehabilitation project. For additional information, see **Chapter 11. Other Project Types**

**85<sup>th</sup> Percentile** – The speed at or below which 85 percent of the motor vehicles travel (FHWA MUTCD, 2003).

**AASHTO Green Book** – American Association of State Highway and Transportation Officials (AASHTO) publication named *A Policy on Geometric Design of Highways and Streets*. See **References** for additional information.

**Access** – Entrance to or exit from land adjacent to a public road. (GDOT *Driveway Manual*, 2004)

**Access Control** – see Control of Access

**Access Management** – Providing (or managing) access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity, and speed.

**ADA (Americans with Disabilities Act)** – A federal law that was enacted in 1990 for the purpose of ensuring that all Americans have the same basic rights of access to services and facilities. The ADA prohibits discrimination on the basis of disability. To effect this prohibition, the statute required certain designated federal agencies to develop implementing regulations.

**Adjusted Hazard Index Rating** – the summation of the Unadjusted Hazard Index rating, the Adjustment Factor for School Buses, and the Adjustment for Train-Vehicle Crash history. ( $AHI = A5 + S + A$ )

**Aesthetics** – Consideration and/or evaluation of the sensory quality of resources (e.g. sight & sound).

**Approach Width**: The half of the roadway that is approaching the roundabout. It is also referred to as approach half-width.

**Approved Bike or Bicycle Route** – See bicycle route, approved

**Arterial** – Functional classification for a street or highway that provides the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.

**Arterial, Rural**– see Rural Arterial

**Arterial, Urban** – see Urban Arterial

**Asymmetrical** – Having a different configuration on either side of a centerline

**At Grade** – A crossing of two highways or a highway and a railroad at the same level.

**Attenuator** – A device used on roads and highways that acts as a buffer and absorbs the energy of a collision with an automobile.

**AutoTURN** – An advanced CAD-based software tool developed by TRANSof Solutions used for analyzing and evaluating vehicle maneuvers for projects such as intersections, roundabouts, bus terminals, loading bays or any on or off-street projects that may involve access, clearance, and maneuverability checks. Additional information about AutoTURN ver 5.1 is available online at: [http://www.transsoftsolutions.com/transsoft/products/at/product\\_overview.asp](http://www.transsoftsolutions.com/transsoft/products/at/product_overview.asp) (TRANSof, 2006).

**Auxiliary Lane** – See Lanes – Auxiliary.

**Average Annual Daily Traffic (AADT)** - The average 24-hour traffic volume at a given location over a full 365 day year. This means the total of vehicles passing the site in a year divided by 365.

**Average Daily Traffic (ADT)** – The total volume during a given time period (in whole

days), greater than one day and less than a year, divided by the number of days in that time period (GDOT *Driveway Manual*, 2004).

**Average Annual Weekday Traffic (AAWT) -**

The average 24-hour traffic volume occurring on weekdays over a full year.

**Average Weekday Traffic (AWT) -** The average 24-hour traffic volume occurring on weekdays for some period of time less than one year.

**Axle Factor** – An adjustment factor that may be applied to traffic counts taken with portable traffic counters that account for two axle impacts as one vehicle. The Axle Factor provides for vehicles with more than two axles, such as trucks with three or more axles.

**Backwater** – “The increase in water surface elevation relative to the elevation occurring under natural channel and floodplain conditions induced upstream from a bridge or other structure that obstructs or constricts a channel (GDOT *Manual on Drainage Design*, 2005).”

**Base Conditions** – An assumed set of geometric and traffic conditions used as a starting point for computations of capacity and level of service (LOS).

**Base Year** – The year the project is completed and anticipated to be open for traffic use.

**Bicycle/Bike Route, Approved** - any roadway where there is an existing bikeway or any location where a bicycle facility is identified for such roadway in a state, regional, or local transportation plan.

**Bifurcate** – An asymmetrical median that typically exceeds a normal median width where both directions of the roadway have independent alignments. The median area may be very wide and may contain natural vegetation and topography. Recommended for use on rural interstates and freeways.

**Big Box Retailer** – A large retail establishment (50,000+ sqft.) that is characteristic of a large windowless rectangular single-story building and large parking areas with few community or pedestrian amenities.

**Broken Back Curves** – See Curves: Broken Back

**Capacity** – the maximum hourly rate at which persons or vehicles reasonably can be expected to traverse a point or uniform segment of a lane or roadway during a given period under prevailing roadway, traffic, and control conditions.

**Centerline** – (1) For a two-lane road, the centerline is the middle of the traveled way; and for a divided road, the centerline may be the center of the median. For a divided road with independent roadways, each roadway has its own centerline. (2) The defined and surveyed line shown on the plans from which road construction is controlled.

**Center Turn Lane** – See Lanes: Center Turn Lane.

**Central Business District** – the commercial core of a city that can be typified by a concentration of commercial and retail land uses and the greatest concentration and number of pedestrians and traffic.

**Central Island** – See Island, Central Island

**Channelizing Island** – See Islands, Channelizing Island

**Chevron Alignment Sign** – Sign that is typically used on a roadway indicate alignment, a curve, or intersection. Chevron Alignment Signs are characterized by single or multiple reflectorized arrows.

**Circulatory Roadway:** The roadway around the central island on which circulating vehicles travel in a counterclockwise direction. The width of the circulatory

roadway depends mainly on the number of entry lanes and the radius of vehicle paths.

**Clear Zone** – The area beyond the roadway edge of travel which provides an environment free of fixed objects, with stable, flattened slopes which enhance the opportunity for reducing crash severity. For further clarification on the definition of Clear Zone, refer to the current edition of the *AASHTO Roadside Design Guide*.

**Cloverleaf Interchange** – See Interchanges, Cloverleaf Interchange.

**Collector** – Functional classification for a street or highway that provides a less highly developed level of service than an arterial, at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials.

**Collector, Rural** – See Rural Collector.

**Collector, Urban** - See Urban Collector.

**Collector-Distributor (CD) Road** – A parallel, controlled-access roadway that separates through traffic from local traffic that is entering and exiting the freeway or interstate system. CD roads are typically used to reduce conflicts associated with weaving.

**Consensus** – a general agreement among the members of a given group or community.

**Construction Standards** – A standard drawing published by GDOT and approved by FHWA.

**Control of Access** – Regulating access (ingress and egress) from properties abutting highway facilities.

**Full control of access** – Where preference is given to through traffic by providing access connections by means of ramps with only selected public roads and by prohibiting crossings at grade and direct driveway connections.

**Partial control of access** – Where preference is given to through traffic to a degree. Access connections, which may be at-grade or grade-separated, are provided with selected public roads and private driveways.

**CORSIM** – A comprehensive microscopic traffic simulation, applicable to surface streets, freeways, and integrated networks with a complete selection of control devices (i.e., stop/yield sign, traffic signals, and ramp metering). It simulates traffic and traffic control systems using commonly accepted vehicle and driver behavior models. (FHWA). Additional information about CORSIM can be found online at: <http://ops.fhwa.dot.gov/trafficanalysisistools/corsim.htm>

**Cross Section** – The transverse profile of a road showing horizontal and vertical dimensions.

**Cross Slope** – The rate of elevation change across a lane or a shoulder.

**Crown** –

**Normal Crown** – Roadway cross section which typically occurs when the roadway is a tangent section. No superelevation is present. Roadway cross slopes (typically 2%) in Georgia drain the roadway from either side of the pavement crown. The high point of the road is generally at the centerline or median, and the road slopes down from there.

**Reverse Crown** – Roadway cross slope that occurs when the normal crown slope (typically 2%) is continuous across a roadway section. This typically occurs as a normal part of a superelevation transition.

**Culvert** – Any structure under the roadway with a clear opening of 20 feet or less measured along the center of the roadway. Culverts are typically built to carry stormwater.



**Curb Cut Ramp** – A ramp that provides access between the sidewalk and the street for people who use wheelchairs which leads smoothly down from a sidewalk to a street, rather than abruptly ending with a curb and dropping roughly 4 to 6 inches (www.Wikipedia.org).

## **Curves –**

**Broken Back Curves** – Successive curves in the same direction separated by a short tangent.

**Circular Curve** – A curve that has an arc of a constant radius. Note: most horizontal curves on Georgia roadways are circular curves.

**Compound Curve** – A curve that involves two horizontal curves of different radii sharing a common point for their PT and PC, respectively.

**Reverse Curve** – A curve consisting of two arcs of the same or different radii curving in opposite directions and having a common tangent or transition curve at their point of junction. The tangent section between the two arcs has 0 length.

**Spiral Curve** – see Transition Curve

**Transition Curve** – A curve of variable radius intended to effect a smooth transition from tangent to curve alignment, also known as a Spiral Curve.

**Vertical Curve** – A curve on the longitudinal profile of a road providing a change of gradient. Vertical curves are parabolic in shape.

**dBA** – The noise levels in decibels measured with a frequency weighting network, corresponding to the "A-Scale" on a standard sound level meter.

**Decision Sight Distance** – See Sight Distances: Decision Site Distance.

**Department, The** – The Georgia Department of Transportation.

**Departure Width - The** half of the roadway that is departing the roundabout. It is also referred to as departure half-width.

**Design Exception** – A design condition that does not meet AASHTO guidelines and requires specific approval from FHWA to be built.

**Design Speed** – A selected speed used to determine the various geometric design features of a roadway. The maximum safe speed that can be maintained over a specified section of the road when conditions are so favorable that the design features of the road govern.

**Design Variance** – A design condition that meets AASHTO guidelines, but does not meet GDOT policy. A design variance requires specific approval from the GDOT Chief Engineer to be built.

**Design Vehicle** – A selected motor vehicle, the weight, dimensions, and operating characteristics of which are used as a control in road design. As defined by FHWA: the longest vehicle permitted by statute of the road authority (state or other) on that roadway (*MUTCD*, 2003).

**Design Volume** – A volume determined for use in design, representing the traffic expected to use the road.

**Design Year** – The anticipated future life of the project. For all GDOT projects, the design year is 20 years from the base year.

**Diamond Interchange** – See Interchanges, Diamond Interchange.

**Directional Interchange** – See Interchanges, Directional Interchange.

**Diverging** – Dividing a single stream of traffic into separate streams.

**Divided Highway** – A highway, street or road with opposing directions of travel separated by a median.

**Driver Expectancy** – What the typical driver would expect to encounter on a roadway.

**Easement** – Area where GDOT purchases the rights to perform work on a section of property, but does not acquire title to the property.

**Embankment** – An earthwork structure that raises the roadway higher than surrounding terrain.

**Enhancements** – Aesthetic additions to a project, such as trees or streetscaping.

**Entry Radius:** The minimum radius of curvature measured along the right curb at entry of a roundabout. Smaller radii may decrease capacity, while larger radii may cause inadequate entry deflection.

**Entry Width:** The perpendicular distance from the right curb line of the entry to the intersection of the left edge line and the inscribed circle of a roundabout.

**Exit Radius:** The minimum radius of curvature measured along the right curb at the exit of a roundabout.

**Exit Width:** The perpendicular distance from the right curb line of the exit to the intersection of the left edge line and the inscribed circle. Exits should be easily negotiable in order to keep traffic flowing through the roundabout and accelerate out of it. Exit radii should then be larger than entering radii.

**Flat Spot** – Location in a superelevation transition where the pavement cross slope is 0%

**Footcandle** – The illumination of a surface with an area of one sqft. on which is uniformly distributed a flux of one lumen. A footcandle is equivalent to one lumen per square foot.

**Free Flow** – Traffic flow in which the speed of any driver is not impeded.

**Free-Flow Speed** – The mean speed at which traffic travels when it is at free flow.

**Freeway** – A controlled access highway system that provides non-interrupted flow of traffic.

**Freeway Capacity** - The maximum sustained 15-minute flow rate, expressed in passenger cars per hour per lane, that can be accommodated by a uniform freeway segment under prevailing traffic and roadway conditions in one direction of flow.

**Frontage Road** – “A road that segregates local traffic from higher speed through-traffic and intercepts driveways of residences, commercial establishments, and other individual properties along the highway (AASHTO *Green Book*, 2004, p. 339).”

**Functional Classification** – The grouping of all streets and highways according to the character of traffic service that they are intended to provide. There are three highway functional classifications: arterial, collector, and local roads.

**Geometric Design** – The arrangement of the visible elements of a road, such as alignment, grades, sight distances, widths, slopes, etc.

**GDOT Policy** – A guideline adopted by the Georgia Department of Transportation that must be followed.

**Glare Screen** – a partition, either continuous or a series of objects of such width and spacing, that is positioned on a median to block the glare from oncoming vehicle headlights.

**Gore** – The paved area of a roadway between two merging or diverging travel lanes. Travel within the gore area is prohibited.

**Grade** – (1) The profile of the center of the roadway, or its rate of ascent or descent.



(2) To shape or reshape an earth road by means of cutting or filling. (3) Elevation.

**Grade Separation** – A crossing of two highways or a highway and a railroad at different levels.

**Green Book** – See AASHTO *Green Book*.

**Gutter Width** – Distance between the edge of traveled way and the face of curb.

**High Occupancy Vehicle** – Vehicles with two or more living, not pre-infant, persons.

**High Water** – The elevation of the highest known specific flooding event at a specific location.

**Highway** – A general term denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way (NJDOT, 2006).

**Highway Section** – The part of the highway included between top of slopes in cut and the toe of slopes in fill (NJDOT, 2006).

**Horizontal Alignment** – Horizontal geometrics of the roadway.

**Horizontal Clearance** – The lateral distance measured either from the traveled way or the face of curb, to the face of a roadside object or feature. The rural shoulder is the part of the roadway beyond the edge of travel that is graded or paved flush with the edge of travel to allow for emergency usage (AASHTO *Roadside Design Guide*, 2006).

**Horizontal Curve** – A curve by means of which a road can change direction to the right or left.

**Human Factors** – Driving habits, ability of drivers to make decisions, driver expectancy, decision and reaction time, conformance to natural paths of movement, pedestrian use and habits, bicycle traffic use and habits.

**Inscribed Circle**: The circle formed just inside of the outer curb line of a circulatory roadway.

**Interchange** – Area where grade separated roadways are connected, and at least one roadway is free flowing.

**Cloverleaf Interchange** – An interchange that uses loop ramps to accommodate left-turns at an intersection and outer ramps to provide for the right turns.

**Diamond Interchange** – An interchange that connects a free flowing major road with a minor road. Diamond interchanges typically consist of four one-way diagonal ramps, one in each quadrant and two at-grade intersections on the minor road. The minor road has two stop signs, two signals, or one stop sign and one signal.

**Directional Interchange** – A free flowing interchange that allows vehicles to travel from one freeway to another freeway at relatively fast and safe speed.

**Semi-directional Interchanges** – An interchange that provides indirect connection between freeways yet more direct connection than loops.

**Service Interchange** – An interchange that connects a freeway to a lesser facility (such as a rest area or weigh station), as opposed to another freeway or minor road.

**Three Leg Interchange** – Also known as T or Y interchanges, this type of interchange is where a major highway begins or ends.

**System Interchange** – An interchange that connects a freeway to freeway.

**Single Point Urban Interchange (SPUI)** – An interchange that features a

single traffic signal at the center of the interchange which controls all left turns. Opposing left-turn movements are completed simultaneously under the protection of this signal.

**Intersection** – The general area where two or more highways join or cross, including the roadway and roadside facilities for traffic movements within the area (AASHTO *Green Book*, 2004).

**Intersection Sight Distance** – See Sight Distances: Intersection Sight Distance.

**Islands:** Devices used to separate or direct traffic in order to facilitate the safe and orderly movement of vehicles. An island may be a raised area that provides a physical barrier to channel traffic movements or a painted area. Specific types of islands include:

**Central Island** – The roundabout island around which traffic circulates. The central island may either be raised (non-traversable) or flush (traversable). Its size is determined by the width of the circulatory roadway and the diameter of the inscribed circle. The width of any truck apron provided is included in the central island width.

**Channelizing Island** - “At an intersection, the area defined by curbs, pavement markings, or unpaved areas formed by pavement edges for the purpose of directing traffic into defined paths, providing refuge areas for pedestrians or providing locations for traffic control devices (AASHTO *Green Book*, 2004).”

**Splitter Island:** An island placed within the approach leg of a roundabout to separate entering and exiting traffic, provide a refuge for crossing pedestrians and bicyclists, and prevent wrong way movements. It is usually designed with raised curbing to deflect, and thereby reduce the speed of, entering traffic, and to provide a safer refuge.

**L<sub>10</sub>** – A sound level that is exceeded 10 percent of the time for the period under consideration. This value is an indicator of both the magnitude and frequency of occurrence of the loudest noise events.

**Lane Balance** – The condition where the number of lanes leaving a diverge is one more than the number of lanes approaching the diverge.

## Lanes

**Acceleration Lane** - A speed-change lane, including tapered areas, for the purpose of enabling a vehicle entering the roadway to increase its speed to a rate at which it can more safely merge with through traffic. Also called an “accel lane” (GDOT *Driveway Manual*, 2004).

**Auxiliary Lane** – The portion of the roadway adjoining the traveled way to help facilitate traffic movements: by providing for parking, speed change, turning, storage for turning, weaving, truck climbing, or for other purposes.

**Center Turn Lane** – A lane within the median to accommodate left-turning vehicles.

**Deceleration Lane** – A speed-change lane, including tapered areas, for the purpose of enabling a vehicle that is making an exit turn from a roadway to slow to a safe turning speed after it has left the mainstream of faster-moving traffic. Also called a “decel lane”; it denotes a right turn lane or a left turn lane into a development (GDOT *Driveway Manual*, 2004).

**Left Turn Lane** – A speed-change lane within the median to accommodate left turning vehicles.

**Inside Lane** - On a multi-lane highway the extreme left hand traffic lane, in the direction of traffic flow, of those lanes available for traffic moving in one direction.

**Parking Lane** – An auxiliary lane primarily for the parking of vehicles.

**Passing Lane** –

(1) A section of two-lane, two-directional road where sufficient clear sight distance exists to allow a safe passing maneuver to be performed.

(2) An additional (third) lane that has been added to a two-lane roadway specifically for passing.

**Turn Lane** – A traffic lane within the normal surfaced width of a roadway, or an auxiliary lane adjacent to or within a median, reserved for vehicles turning left or right at an intersection.

**Traffic Lane** – The portion of the traveled way for the movement of a single line of vehicles in one direction.

**Letting** – The date GDOT opens sealed bids from prospective contractors.

**Level of Service** – A qualitative rating of a road's effectiveness relative to the service it renders to its users (from A-best to F-worst). LOS is measured in terms of a number of factors, such as operating speed, travel time, traffic interruptions, freedom to maneuver and pass, driving safety, comfort, and convenience.

## Lighting

**High Mast Roadway Lighting**– Illumination of a large area by means of a group of luminaires designed to be mounted in fixed orientation at the top of a high mast, generally 80 feet or higher (AASHTO *Roadway Lighting Design Guide*, 2005).

**Pedestrian Lighting** – Illumination of public sidewalks for pedestrian traffic generally not within rights-of-way for vehicular traffic roadways. Included are skywalks (pedestrian overpasses), sub-walks (pedestrian tunnels), walkways giving

access to park or block interiors and crossings near centers of long blocks (AASHTO *Roadway Lighting Design Guide*, 2005).

**Roadway Lighting** - Illumination of roadways by means of fixed luminaires in order to reduce driver conflict with other vehicles and pedestrians.

**Limited Access Facility** – A street or highway to which owner or occupants abutting land have little or no right of access.

**Local Road** – Functional classification that consists of all roads not defined as arterials or collectors; primarily provides access to land with little or no through movement.

**Longitudinal Barrier** – A barrier that is intended to safely redirect an errant vehicle away from a roadside or median hazard (CODOT, 2006)

**Loop Detector** – A traffic monitoring tool that is used to detect the presence of vehicles at an intersection to activate a traffic signal.

**Median** – The portion of a divided roadway separating the traveled ways for traffic in opposite directions (NJDOT, 2006).

**Median Crossover** – An opening constructed in the median strip of a divided highway designed to allow traffic movements to cross from one side of the highway to the other. In some cases, the Access Management Engineer may require the design to be such that some movements be physically prohibited (*GDOT Driveway Manual*, 2004).

**Median Width** – The overall width of a median measured from edge of travel lane to edge of travel lane.

**Merging** – The converging of separate streams of traffic to a single stream.

**Mitigation** – sequentially avoiding impacts, minimizing impacts, and compensating for any unavoidable impacts (WSDOT, 2005).

**Mitigation Plan** – document(s) that contain all information and specifications necessary to fully implement and construct a compensatory mitigation project (WSDOT, 2005).

**Nominal Safety** – A design alternative's adherence to design criteria and standards.

**Normal Crown** – See Crown: Normal Crown

**Operating Speed** – Actual speed at which traffic flows.

**Pace Speed** – The highest speed within a range of speeds (typically within 10 mph) that represents more vehicles than in any other like range of speed (FHWA *MUTCD*, 2003)

**Parametrics** – A modeling platform with application areas that include urban, highway, public transport, congested, free flow, ITS and HOV. Additional information about Parametrics is available online at: <http://www.parametrics.com>

**Parking Lane** – See Lanes: Parking Lane

**Passenger Car** – A passenger automobile with similar size and operating characteristics of a car, sport/utility vehicle, minivan, or pick-up truck.

**Passing Lane** – See Lanes: Passing Lane.

**Passing Sight Distance** – See Sight Distances: Passing Sight Distance.

**Pavement Markings** – Devices or paint placed on the roadway to mark pavement for vehicular and pedestrian traffic control.

**Pedestrian** – Georgia State law defines a Pedestrian as: "Any person who is afoot" (GLC 40-1-1). By state definition, roller skaters, in-line skaters, skateboarders, and

wheelchair users are also considered pedestrians.

**Pedestrian Refuge** – Also referred to as a refuge island/area or pedestrian island, is a section of pavement or sidewalk where pedestrians can stop before finishing crossing a road ([www.wikipedia.org](http://www.wikipedia.org)).

**Permit** – A legal document issued by the Department authorizing an applicant to do specific work on state rights-of-way (GDOT *Driveway Manual*, 2004).

**Posted Speed** – The speed limit posted on a section of roadway.

**Preventative Maintenance (PM) Projects** – the planned strategy of cost effective treatments to an existing roadway system and its appurtenances that preserves the system, retards future deterioration, and maintains or improves the functional condition of the system without increasing structural capacity.

**Profile** – A longitudinal section of a roadway, drainage course, etc.

**Profile Grade Line** – The point for control of the vertical alignment. Also, normally the point of rotation for superelevated sections (NJDOT, 2006).

**Project** – "A portion of a highway that a State proposes to construct, reconstruct, or improve as described in the Preliminary Design Report or applicable Environmental Document (FHWA VE Website, 2005)."

**Queue** – When one or more vehicles is traveling less than 7 mph. (SimTraffic, 2006) A vehicle is considered queued when it is either stopped at a traffic light or stop sign or behind another queued vehicle.

**Ramp Metering** – Use of a traffic control device for the intent of regulating the flow of traffic entering a freeway. The device, which is typically a traffic signal or a two-phase (red

and green, no yellow) light, prevents multiple vehicles entering a freeway ramp.

**Reaction Time** – “The time from the onset of a stimulus to the beginning of a driver's (or pedestrian's) response to the stimulus, by a simple movement of a limb or other body part. (FHWA, 2001  
<http://www.tfhrc.gov/safety/pubs/97135/glossary.htm#r>).“

**Retaining Wall** – A structure that prevents dirt from sliding or eroding.

**Reverse Crown** – See Crown: Reverse Crown

**Reverse Curve** – See Curves: Reverse Curve

**Right-of-way (ROW or R/W)** - All land under the jurisdiction of, and whose use is controlled by the Department (GDOT *Driveway Manual*, 2004).

**Right-of-Way Flares** – Areas needed for sight distance triangles at an intersection that should be kept free of obstructions in order to provide adequate sight distance.

**Roadside** – The area adjoining the outer edge of the roadway (NJDOT, 2006).

**Roadway** – The portion of a highway, including shoulders, for vehicle use (NJDOT, 2006).

**Roadway Characteristics** – The geometric characteristics of the freeway segment under study, including the number and width of lanes, right-shoulder lateral clearance, interchange spacing, vertical alignment, and lane configurations.

**Running Speed** – For all traffic, or a component thereof, the summation of distances traveled divided by the summation of running time.

**Rural Area** – “Those areas outside the boundaries of urban areas (AASHTO *Green Book*, 2004).”

**Rural Arterial** – Functional classification for a street or highway that integrates interstate and inter-county service, provides for movements between urban areas, and provides for relatively high travel speeds with minimum interference to through movement (AASHTO *Green Book*, 2004).

**Rural Collector** - A street or highway that “generally serves travel of primarily intra-county rather than statewide importance and constitute those routes on which (regardless of traffic volume) predominant travel distances are shorter than on arterial routes. Consequently, more moderate speeds may be typical, on the average (AASHTO *Green Book*, 2004).”

**Rural Section** – Any roadway without curb and gutter.

**Rural Shoulder** – The part of the roadway beyond the edge of travel that is graded or paved flush with the edge of travel to allow for emergency usage.

**Semi-Directional Interchange** – See Interchanges, Semi-Directional Interchange

**Service Interchange** – See Interchanges, Service Interchange.

**Shoulder** – The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses (NJDOT, 2006).

**Shoulder Rumble Strip** – “A longitudinal design feature installed on a paved roadway shoulder near the travel lane. It is made of a series of indented or raised elements intended to alert inattentive drivers through vibration and sound that their vehicles have left the travel lane. On divided highways, they are typically installed on the median side of the roadway as well as on the outside (right) shoulder (FHWA, 2001, Roadway Shoulder Rumble Strips Technical Advisory Website



<http://www.fhwa.dot.gov/legregs/directives/techadv/t504035.htm>.”

**Sidewalk** – The portion of a street between the curb lines, or the lateral lines of a railway, and the adjacent property lines, intended for use by pedestrians (Georgia Code and Rules 40-1-1).

**Sight Distances** – The length of roadway ahead visible to a driver.

**Decision Sight Distance** – Sight distance that allows a driver to determine and complete the most efficient maneuver in response to an unexpected condition

**Intersection Sight Distance** – Sight distance needed for decisions at complex locations such as intersections. Values are substantially greater than Stopping Sight Distance.

**Passing Sight Distance** – Sight distance needed for passing other vehicles (applicable only on two-way, two-lane highways at locations where passing lanes are not present).

**Stopping Sight Distance** - Sight distance needed for a driver to see an unexpected condition and stop the vehicle. At a minimum, Stopping Sight Distance is required at all locations on all roadways.

**Sight Distance Triangle** – Specified areas along intersection approach legs and across their included corners that should remain clear of obstructions. (AASHTO *Green Book*, 2004)

**Slope** – The face of an embankment or cut section; any ground the surface of which makes an angle with the plane of the horizon.

**Speed Design** – See Design Speed

**Speed Zone** – a section of highway with a speed limit that is established by law but which might be different from a legislatively

specified statutory speed limit (FHWA *MUTCD*, 2003).

**Spiral** – See Curves: Transition Curve

**Standard** – Criteria having recognized and usually permanent values which are established formally as a model or requirement.

**Stopping Sight Distance** – See Sight Distances: Stopping Sight Distance.

**Superelevation** – The elevating of the outside edge of a curve to partially offset the centrifugal force generated when a vehicle rounds the curve.

**Superelevation Runoff** – “The length of roadway needed to accomplish a change in outside lane cross slope from zero (flat) to full superelevation, or vice versa (AASHTO *Green Book*, 2004, p. 175). “

**Superelevation (Tangent) Runout** – The longitudinal distance required to transition between normal crown and 0% cross slope (or vice versa).

**Superelevation Transition** – “The superelevation runoff and tangent run out sections (AASHTO *Green Book*, 2004, p. 175).”

**Sustained Grade** – A continuous road grade of appreciable length and consistent, or nearly consistent, gradient.

**Synchro** – software application used for traffic analysis, specifically to optimize traffic signal timing and perform capacity analyses. The software supports the Universal Traffic Data Format (UTDF) for exchanging data with signal controller systems and other software packages.

**System Interchange** – See Interchanges, System Interchange

**T Interchange** - See Interchanges, Three-Leg Interchange

**Traffic Characteristics** – any characteristic of the traffic stream that may affect capacity, free-flow speed, or operations, including the percentage composition of the traffic stream by vehicle type and the familiarity of drivers with the freeway.

**Traffic Control Device** – A sign, signal, marking or other device placed on or adjacent to a street or highway by authority of a public body or official having jurisdiction to regulate, warn, or guide traffic.

**Traffic Lane** – See Lanes: Traffic Lane.

**Transfer Road** – A road that connects core roadways and C-D roads

**Transition** – A section of variable pavement width required when changing from one width of traveled way to a greater or lesser width.

**Transition Curve** – See Curves: Transition Curve

**Traveled Way** – The portion of the roadway provided for the movement of vehicles, exclusive of shoulders, auxiliary lanes and bicycle lanes (NJDOT, 2006).

**Truck Apron** – The mountable portion of a roundabout central island that is drivable specifically provided to accommodate the path of the rear left wheels of larger vehicles.

**Turn Lane** – See Lanes: Turn Lane.

**Turning Path** – The path of a designated point on a vehicle making a specified turn.

**Urban Area** – “Places within boundaries set by the responsible State and local officials having a population of 5,000 or more (AASHTO *Green Book*, 2004).”

**Urban Arterial** – Functional classification for a street or highway that serves urbanized areas and provides the highest level of service at the greatest speed for the longest

uninterrupted distance, with some degree of access control.

**Urban Collector** – A street or highway that provides both land access service and traffic circulation within residential neighborhoods, commercial or industrial areas. It differs from the arterial system in that facilities on a collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. Conversely, the collector street also collects traffic from local streets in residential neighborhoods and channels it into the arterial system (AASHTO *Green Book*, 2004).

**Urban Roadway** – A roadway that is classified functionally as an Urban Arterial, Urban Collector, or Urban Local Street that operates at speeds generally less than or equal to 45 mph and features curb and gutter.

**Urban Shoulder** – The part of an urban roadway beginning at the edge of travel and extending to the breakpoint of the fore slope or back slope that ties to the natural terrain.

**Value Engineering** – “The systematic application of recognized techniques by a multi-disciplined team to identify the function of a product or service, establish a worth for that function, generate alternatives through the use of creative thinking, and provide the needed functions to accomplish the original purpose of the project, reliably, and at the lowest life-cycle cost without sacrificing safety, necessary quality, and environmental attributes of the project. (CFR Title 23 Part 627).”

**Variance** – See Design Variance.

**Vertical Alignment (Profile Grade)** – The trace of a vertical plane intersecting the top surface of the proposed wearing surface, usually along the longitudinal centerline of the roadbed, being either elevation or

gradient of such trace according to the context.

**Vertical Curve** – See Curves: Vertical Curve.

**Weaving** – The crossing of two or more traffic streams traveling in the same general direction along a significant length of highway without the aid of traffic control devices (with the exception of guide signs). Weaving segments are formed when a merge area is closely followed by a diverge area, or when an on-ramp is closely followed by an off-ramp and the two are joined by an auxiliary lane. (TRB *Highway Capacity Manual*, 2000)

**Work Zone** – The work area and the section of highway used for traffic control devices related to the work area (NJDOT, 2006).

**Yield Line:** A broken line marked across the entry roadway where it meets the outer edge of the circulatory roadway and where entering vehicles wait, if necessary, for an acceptable gap to enter the circulating flow.

**Y Interchange** - See Interchanges, Three-Leg Interchange.